

<b>Notice of Allowability</b>	<b>Application No.</b>	<b>Applicant(s)</b>	
	09/817,323	ROYER ET AL.	
	<b>Examiner</b>	<b>Art Unit</b>	
	Zachary A. Davis	2137	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address--**

All claims being allowable, PROSECUTION ON THE MERITS IS (OR REMAINS) CLOSED in this application. If not included herewith (or previously mailed), a Notice of Allowance (PTOL-85) or other appropriate communication will be mailed in due course. **THIS NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIGHTS.** This application is subject to withdrawal from issue at the initiative of the Office or upon petition by the applicant. See 37 CFR 1.313 and MPEP 1308.

1. ☒ This communication is responsive to the amendment received 07 June 2006.
2. ☒ The allowed claim(s) is/are 1-24.
3. ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
  - a) ☐ All    b) ☐ Some\*    c) ☐ None    of the:
    1. ☐ Certified copies of the priority documents have been received.
    2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
    3. ☐ Copies of the certified copies of the priority documents have been received in this national stage application from the International Bureau (PCT Rule 17.2(a)).

\* Certified copies not received: \_\_\_\_\_.

Applicant has THREE MONTHS FROM THE "MAILING DATE" of this communication to file a reply complying with the requirements noted below. Failure to timely comply will result in ABANDONMENT of this application.  
**THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.**

4. ☐ A SUBSTITUTE OATH OR DECLARATION must be submitted. Note the attached EXAMINER'S AMENDMENT or NOTICE OF INFORMAL PATENT APPLICATION (PTO-152) which gives reason(s) why the oath or declaration is deficient.
5. ☐ CORRECTED DRAWINGS ( as "replacement sheets") must be submitted.
  - (a) ☐ including changes required by the Notice of Draftsperson's Patent Drawing Review ( PTO-948) attached
    - 1) ☐ hereto or 2) ☐ to Paper No./Mail Date \_\_\_\_\_.
  - (b) ☐ including changes required by the attached Examiner's Amendment / Comment or in the Office action of Paper No./Mail Date \_\_\_\_\_.

Identifying indicia such as the application number (see 37 CFR 1.84(c)) should be written on the drawings in the front (not the back) of each sheet. Replacement sheet(s) should be labeled as such in the header according to 37 CFR 1.121(d).
6. ☐ DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.

**Attachment(s)**

- |   |   |
|---|---|
| <ol style="list-style-type: none"> <li>1. <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)</li> <li>2. <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)</li> <li>3. <input checked="" type="checkbox"/> Information Disclosure Statements (PTO-1449 or PTO/SB/08),<br/>Paper No./Mail Date <u>20060501</u></li> <li>4. <input type="checkbox"/> Examiner's Comment Regarding Requirement for Deposit<br/>of Biological Material</li> </ol> | <ol style="list-style-type: none"> <li>5. <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)</li> <li>6. <input type="checkbox"/> Interview Summary (PTO-413),<br/>Paper No./Mail Date _____.</li> <li>7. <input checked="" type="checkbox"/> Examiner's Amendment/Comment</li> <li>8. <input checked="" type="checkbox"/> Examiner's Statement of Reasons for Allowance</li> <li>9. <input type="checkbox"/> Other _____.</li> </ol> |
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### **EXAMINER'S AMENDMENT**

1. A response was received on 07 June 2006. By this response, no claims have been added, canceled, or amended. Claims 1-24 are currently pending in the present application.

2. An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR 1.312. To ensure consideration of such an amendment, it **MUST** be submitted no later than the payment of the issue fee.

Authorization for this examiner's amendment was given in a telephone interview with Alexander Burke on 21 August 2006.

The application has been amended as follows:

**IN THE CLAIMS:**

Please **REPLACE** Claims 20, 21, 23, and 24 with the following amended claims.

20. A system supporting concurrent operation of a plurality of Internet compatible applications, comprising:

a browser application including[[,]]

a display generator for providing a user interface display permitting user entry of identification information and commands for a plurality of Internet compatible applications and for providing user identification information to a first application;

a URL generator for adaptively generating a URL including URL fields incorporating ~~an encrypted URL address portion~~ a URL address portion which has been encrypted and a non-encrypted session identifier; and

a processor for initiating communication of said generated URL to said first application in response to validation of said user identification information, said first application having access to a key for decrypting said ~~encrypted URL address portion~~ URL address portion which has been encrypted.

21. A method employed by a first application for encoding URL link data for use in detecting unauthorized URL modification in a system supporting concurrent operation of a plurality of applications, comprising the steps of:

receiving an encryption key;

processing a URL link to a second application differently to an intra-application link to a web page provided by said first application by using said received encryption key to encrypt a URL link address portion of said URL link to said second application to produce a processed URL and by non-encryption of said intra-application link; and including said processed URL in data representing a web page and [[for]] communicating said web page representative data including said processed URL to a requesting application.

23. A method for encoding URL link data for use in detecting unauthorized URL modification in a system supporting concurrent operation of a plurality of applications, comprising the steps of:

providing a common encryption key to said plurality of concurrently operating applications; [[and]]

receiving said encryption key;

adaptively processing a URL link to a second application differently to an intra-application link to a web page provided by [[said]] a first application by using said received encryption key to encrypt a URL link address portion of said URL link to said second application to produce a processed URL and by non-encryption of said intra-application link; and

including said processed URL in data representing a web page and [[for]] communicating said web page representative data including said processed URL to a requesting application.

24. A method for processing URL link data for use in detecting unauthorized URL modification in a system supporting concurrent operation of a plurality of applications, comprising the steps of:

adaptively generating a URL link to a second application differently to an intra-application link to a web page provided by [[said]] a first application by using a received encryption key to encrypt a URL link address portion of said URL link to said second application to produce a generated URL;

providing a key to said second application for decrypting said encrypted URL address portion; and

including said generated URL in data representing a web page and [[for]] communicating said web page representative data including said generated URL to a requesting application.

***Allowable Subject Matter***

3. Claims 1-24 are allowed.
4. The following is an examiner's statement of reasons for allowance:

Exemplary independent Claim 1 is directed to a system in a first application for encoding URL data in order to detect unauthorized URL modification including an input processor that receives an encryption key; a URL processor that adaptively processes a link to a second application by encrypting a URL address portion of the link to produce a processed URL, and processes a link within the first application by not encrypting the link; and a communication processor that includes the processed URL in data representing a web page and communicates the web page data to a requesting application. The remaining independent Claims are directed to related systems and methods that include similar or corresponding limitations, notably with respect to the encryption of an address portion of a URL. The closest prior art, Levergood, US Patent 5708780, discloses receiving an encryption key; processing links to a second application by encrypting portions of those links and processing links within a first application by not further encrypting those links; and including processed links in web page data that is communicated to requesting applications. However, Levergood does not explicitly disclose that it is an address portion of the links that is encrypted. Other close prior art, Calamera et al, US Patent 6463533, discloses a system that encodes (e.g. by compressing) the address portion of a URL and incorporates the encoded portion with the plaintext version into a single string and further incorporates the

processed string into formatted data; however, as noted by Applicant (for example, at page 11 of the present response), Calamera states that the user's identity would not be revealed and teaches against conveying information in URL data fields. Because Calamera teaches against sending information in URL data fields and only allows a single server (not the destination) to decrypt the encrypted portions of the URL, one of ordinary skill in the art would not have been motivated to combine the teachings of Calamera with Levergood. Therefore, the cited prior art does not teach or suggest all of the limitations of the claimed invention.

The Examiner notes that Applicant attempts to distinguish the "DOMAIN" and "PATH" in Calamera from the claimed "address portion of a URL" (see, for example, pages 9-10 of the present response). However, the Examiner notes that the domain and path are both described in the present specification as being used to generate the hash value of the address portion that is then encrypted (see page 9, line 34-page 10, line 2, of the present specification).

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

### ***Conclusion***

5. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure.

- a. Payne et al, US Patent 5909492, discloses system that includes a URL authenticator, such as a digital signature, incorporated into sent URLs.
- b. Lincke et al, US Patent 6253326, discloses a system that encrypts request parameters, such as URLs, transmitted over a network, in order to foil replay attacks.
- c. Royer et al, US Patent 7043752, claims priority to the same provisional application as does the present application.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Zachary A. Davis whose telephone number is (571) 272-3870. The examiner can normally be reached on weekdays 8:30-6:00, alternate Fridays off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Emmanuel Moise can be reached on (571) 272-3865. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



Art Unit: 2137

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

*ZAD*  
zad

*Emmanuel L. Moise*  
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SUPERVISORY PATENT EXAMINER